# Towards a Comprehensive Model for Trauma

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## Introduction

Currently, a posttraumatic stress disorder (PTSD) diagnosis is the closest thing there is to a trauma diagnosis. However, PTSD criteria do not cover the entire range of trauma-based symptoms and conditions (Dansie et al., 2012; Hall, 2000). The reality is that many people suffering with trauma do not qualify for a PTSD diagnosis, and are instead diagnosed with different disorders based on the symptoms they display, not on their etiology (D'Andrea, Ford, Stolbach, Spinazzola, & van der Kolk, 2012; Haven, 2009; Herman, 1992; McFarlane, 2010; Sledjeski, Speisman, & Dierker, 2008; van der Kolk, 1994). Reducing or containing various symptoms, without first locating and addressing their cause, often results in inaccurate and multiple diagnoses. This prolongs unnecessary suffering, usually leads to retraumatisation, is time consuming and wasteful of scarce resources. Therefore improved classification of disorders according to etiology is very much warranted.

Since its third edition in 1980, Bracha and Maser (2008) and Maser et al. (2009) contend that the Diagnostic and Statistical Manual of Mental Disorders (DSM) has taken a primarily descriptive, as opposed to etiological, approach to defining and classifying disorders. Even Friedman et al. (2011) admit that the classification schemes where PTSD was placed in the DSM were based on symptom description rather than etiology. The categorisation of seemingly different disorders is a serious issue within psychiatry, which, as McLaren (2012) argues, is due to the fact that there is no articulated model of mental disorder. It goes without saying that the development of an accurate model of any disorder is difficult, if not impossible, without first determining its cause or causes.

Evidence of the above is to be found in the fact that somatic responses to traumatic experiences

are placed in Somatic Symptom Disorders (SSD). Alterations in consciousness are listed in Dissociative Disorders (DD) and intrusive symptoms in a PTSD diagnosis, whereas interpersonal relationship problems become Borderline Personality Disorders (Hall, 2000). This is despite the fact that there is agreement between some researchers that the aforementioned trauma-based disorders share a common psychobiological pathology which is dissociative in nature (Brand, Lanius, Vermetten, Loewenstein, & Spiegel, 2012; Dalenberg et al., 2007; Moskowitz, 2011; Nijenhuis, 2014; Nijenhuis, Spinhoven, & van Dyck, 1998; Putnam, 1985; Sykes, 2012; van der Hart, Nijenhuis, & Steele, 2005). I believe that there is very strong evidence to group, at the very minimum, DD, SSD and PTSD together under the new category 'Trauma-and-Stressor-Related Disorders' in the DSM-5 (American Psychiatric Association, 2013). Indeed, one could argue that the creation of a new category entitled 'Trauma-and-Dissociation-Based Disorders' might just include the majority of disorders listed in the DSM-5 if they were classed according to their cause (i.e. trauma) and not their symptoms.

## The DSM Model for Trauma

At present, the most widely used model for trauma is criterion A1[1] in the DSM-5. An A1 event must be nominated in order to receive a PTSD diagnosis. It is crucial to note that if A1 is not met, the remaining criteria will not be considered. This is essentially the same as saying that without experiencing such an event, it is impossible to be traumatised. According to Bodkin, Pope, Detke, and Hudson (2007), this is because PTSD is one of the few psychiatric diagnoses with assumptions regarding its etiology. However, if the DSM's model of trauma were replicable, an A1 event would always result in PTSD. The question is, does it? Is it possible that an A1 event might traumatise one person and not another? Might another event not included in A1 be traumatic? Why? The answer to all of these questions lies in the response to, or the experience of an event.

Without a response to an event—even an A1 event—it is impossible to be traumatised. This is not to say that certain events cannot be considered horrific and traumatic. However, the question remains as to whether it is the event itself, or the experience of it, that is potentially traumatic.

[1]The person was exposed to: death, threatened death, actual or threatened injury, or actual or threatened sexual violence (American Psychiatric Association, 2013).

There is very strong evidence to suggest that it is in fact the response that increases the propensity for developing PTSD and other trauma-related disorders (Bovin & Marx, 2011; Breh & Seidler, 2007; Candel & Merckelbach, 2004; Hagenaars, Minnen, & Hoogduin, 2007; Kumpula, Orcutt, Bardeen, & Varkovitzky, 2011; Lancaster, Melka, & Rodriguez, 2011; Lima et al., 2010; Ozer, Best, Lipsey, & Weiss, 2003; Rocha-Rego et al., 2009; Roemer, Orsillo, Borkovec, & Litz, 1998; Werner & Griffin, 2012). Responses to threat can include dissociation; both somatic and psychic, intense emotions and appraisals ("I'm dirty", "It was my fault", "I should have fought back", etc.). For the above reasons, the deletion of A2[2] from the DSM-5 was most certainly a mistake. I argue, along with many researchers, that not only should it be reinstated, it should also be expanded to include peri and posttraumatic appraisals, emotions and both psychic and somatic dissociative responses (Adler, Wright, Bliese, Eckford, & Hoge, 2008; Armour et al., 2011; Kilpatrick, Resnick, & Acierno, 2009; Lancaster et al., 2011; Rizvi, Kaysen, Gutner, Griffin, & Resick, 2008).

It can be concluded from the discussions above that there is no such thing as an objective stressor. For something to be stressful it has to be experienced as so. In fact, van der Hart et al. (2005, p. 414) write: "Along with many others in the field of trauma, we regard 'trauma' as a subjective response of an individual, not the quality of an event. Thus, we consider only those who have developed at least substantial symptoms of trauma-related disorders over the course of their lives to be traumatized". An efficient model of trauma has to include and place due emphasis and weight on the traumatic response as well as the originating stressor, otherwise the very people who need help will not get it, or, indeed, might even receive the wrong help.

## Towards a Comprehensive Model for Trauma

At its simplest, Browne (1990) argues that trauma is unexperienced experience. This could in fact also be a definition for dissociation[3]. Browne maintains that "instead of a way of avoiding external danger, it [dissociation] is now utilised to deal with the threat of internal destabilisation; whenever we are faced with an overwhelming experience that we sense as

[2]The person's response involved intense fear, helplessness, or horror (American Psychiatric Association, 2000).

[3]See Nijenhuis and van der Hart (2011) for a more comprehensive look at dissociation and its various definitions.

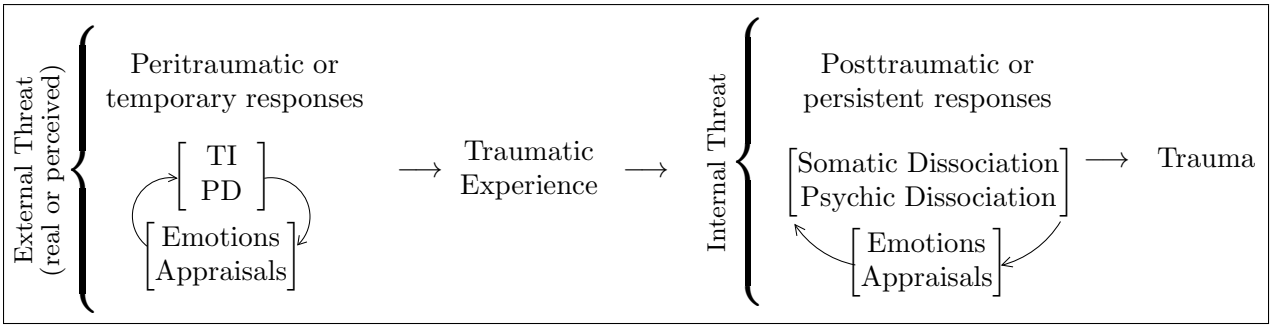


Figure 1. Towards a comprehensive model of trauma. TI: tonic immobility and PD: peritraumatic dissociation

potentially disintegrating, we have the ability to suspend it and "freeze" it in an unassimilated, inchoate form and maintain it in that state indefinitely, or for as long as necessary" (Browne, 1990, p. 30).

My interpretation of Browne's idea is that external threat is firstly avoided by employing peritraumatic dissociation. Peritraumatic dissociation includes tonic immobility, or somatic dissociation (an involuntary inability to physically move or call out for help etc.) as well as psychological dissociation (depersonalisation etc.). Trauma develops when a threat is internalised by continuing to dissociate from it, thereby preventing its resolution. In other words, the experience now becomes *permanently*, or chronically, unexperienced. The mechanism by which an experience remains unexperienced is dissociation. It is important to stress that traumatic experience does not necessarily lead to trauma. For trauma to occur, dissociation *has* to be present. I argue therefore that chronic dissociation *always* results in trauma (see Figure 1).

In support of the inherent link between trauma and dissociation, Scaer (2013, p. 9) says that: "Dissociation therefore becomes the defining clinical state of trauma". This is also the reason why I argue that the addition of a dissociative subtype to a PTSD diagnosis in the DSM is entirely superfluous. PTSD, or any trauma-related disorder, *could not exist* without dissociation. Dissociation is central to the manifestation of trauma. Moreover, there is already implicit recognition of dissociation's central importance to PTSD as evidenced by criteria B to E in the DSM-5, so the addition of a subtype just does not make sense.

## The Human Response to Threat

Ethological studies have laid the groundwork for understanding not just animal behaviour, but also human behaviour when faced with threat (Gallup, Nash, Donegan, & McClure, 1971; Maser & Gallup, 1977; Tinbergen, 1974). How humans respond to, and internalise threat, is absolutely crucial to understanding the etiological role that dissociation plays in maintaining and creating trauma. The psychological response to stress is a widely accepted phenomenon, however the somatic response (such as tonic immobility) has largely been ignored by mainstream psychiatry, despite its importance to trauma (Breh & Seidler, 2007; Candel & Merckelbach, 2004; Eilam, Izhar, & Mort, 2011; Hetzel-Riggin, 2010; Kumpula et al., 2011; Pole, 2007; Sugar & Ford, 2012; Volchan et al., 2011). During the preparation of the DSM-5, for instance, Bracha and Maser (2008) made the argument that tonic immobility should be discussed as a peritraumatic risk factor for PTSD. They even hoped that it might be considered for inclusion in the conceptualisation of criterion A experiences. However, these suggestions were not taken on board.

It is critically important to note that, in humans, a threat can be sensed as real or perceived (Gallup & Rager, 1996; Ratner, 1967). What is also crucially important is any sense of inescapability from threat. Not being able to escape, or attempts at escape being thwarted, is particularly relevant in the case of children, who are more prone to dissociating because of their stage of development (Anda et al., 2006; Humphreys, Sauder, Martin, & Marx, 2010; Janov, 2011; Lange, 2011). In addition, Scaer (2007) believes that if trauma is inflicted by a person who represents a vital resource to a child, it is often perceived as a mortal threat, what Freyd (1996) calls 'betrayal trauma', and it is for this very reason that children are extremely vulnerable to traumatic stress.

## Innate and Instinctual Behaviour

Scaer (2007) proposes that not discharging the autonomic energy[4] that responses such as tonic immobility generate may not be an adaptive behaviour in humans, but is instead a dangerous suppression of instinctual behaviour resulting in the imprinting of the traumatic experience in

[4]"... the animal will arouse and begin to tremble (...) The animal's behavior at times seems to resemble an unconscious attempt to complete the act of survival, as if the last protective motor or muscular activity is locked in unconscious procedural memory and needs to be released, or completed, perhaps as a means of "discharging" retained autonomic energy", (Scaer, 2007, p. 18).

unconscious memory and arousal systems of the brain. His hypothesis is supported by the fact that trauma appears to affect only humans and domesticated animals. Wild animals freely discharge this energy which ensures their survival. Eibl-Eibesfeldt (1997) argues that when stimulus-response psychology was born at the beginning of the 20th century, many saw 'instinct' as a vitalistic nearly mystical force guiding animals, but not humans. It is also very significant that the term 'instinct' is more often than not referred to as 'drive' in psychology textbooks (Levine, 2010). The cultural distancing of humans from their evolutionary past is also to be found in the notion that humans come into this world as a blank slate (Eibl-Eibesfeldt, 1997).

A shift is happening however. There is a burgeoning movement for evolution theory to be included in mental health research (Boyer & Bergstrom, 2011; Stein & Nesse, 2011). In fact, Bracha and Maser (2008) proposed that it might offer a conceptual framework for the advancement of DSM-5, in terms of both psychopathology research and treatment. In addition, both Taylor, Gooding, Wood, and Tarrier (2011) and Cantor (2009) posit that there are two concepts which appear central to understanding some forms of psychopathology from an evolutionary perspective, namely: defeat and entrapment. It is no coincidence that feeling defeated and trapped often result in helplessness: a theme central to the formation of trauma (Fosha, 2002; Herman, 1992). Indeed, two experiments by Gallup and Maser (1977) and Maser, Gallup, Hicks, and Edson (1974) showed that when fear—which often results from feeling/being defeated—and inescapability are coupled with tonic immobility, periods of immobilisation were considerably longer than if these elements were not present. Significantly, both fear and helplessness formed two of the three ingredients of the now deleted criterion A2.

## Emotions and Appraisals

In a study by Rasmussen, Rosenfeld, Reeves, and Keller (2007), symptoms of PTSD were present in roughly one quarter of those who reported an event that elicited A2 emotions, but were rarely present among those who did not respond with horror, fear or helplessness. The study concluded that the cluster of psychological symptoms characterised as PTSD, appears much more closely linked to the experience of an event as threatening rather than the event itself being threatening. This result was also found by Boals and Schuettler (2009) and replicated in another study by Cameron, Palm, and Follette (2010). In addition, a study by Bedard-Gilligan

and Zoellner (2008) showed that the absence of A2 emotions predicted the absence of PTSD related symptoms and their duration and impairment.

It is interesting to note that the two PTSD models which have received the most support in confirmatory factor analysis studies (Elhai, Biehn, Naifeh, & Frueh, 2011) are the Emotional Numbing model by King, Leskin, King, and Weather (1998) and the Dysphoria model by Simms, Watson, and Doebbeling (2002), both of which include dissociative phenomena such as reexperiencing[5], avoidance and numbing. Needless to say 'emotional numbing' and other terms such as 'experiential avoidance' are just different ways of saying dissociation. Indeed, Roemer et al. (1998) have shown that emotional numbing uniquely predicts PTSD symptomatology, and a study by Carlson, Dalenberg, and McDade-Montez (2012) found that dissociation is consistently and very strongly related to the presence and severity of PTSD symptoms.

Many people who have been physically immobilised can feel a lot of shame and self blame which can lead to appraisals such as "It was my fault" (O'Donnell, Elliott, Wolfgang, & Creamer, 2007; Platt & Freyd, 2012; Wilson, Drozdek, & Turkovic, 2006). This has led some researchers to conclude that tonic immobility is inherently traumatic (Bovin & Marx, 2011), however others disagree (Levine, 2010)[6]. It is possible that having a negative experience of tonic immobility could stem from not having any prior knowledge or experience of the response, leading to confusion and shock. Or indeed, as Scaer and Eibl-Eibesfeldt argue, it might be evidence of a cultural suppression of natural instincts, especially those pertaining to the body. Posttraumatic appraisals have been shown to be pivotal in the development of trauma (Brown & de Prince, 2008; DePrince, Chu, & Pineda, 2011; Sherrer, 2011). Two studies by Kira et al. (2011) and Martin, Cromer, DePrince, and Freyd (2011), concluded that how people thought about and appraised their traumatic experiences, regardless of what those experiences were, were stronger predictors of outcomes than cumulative trauma. Additionally, a study by Fusé, Forsyth, Marx, Gallup, and Weaver (2007) found that only 'fear for life' loaded on the tonic immobility factor,

[5]"The fundamental error that I am struggling to demonstrate is all contained in this prefix re and in the use of the term memory, or repressed memory, for once we use these words in this way, we already are making the assumption that the traumatic event has been fully experienced and is now integrated in the self as memory", (Browne, 1990, p. 32). It appears more probable therefore that 'reexperiencing' is in fact an attempt to integrate what remains unexperienced, what van der Hart et al. (2005, p. 413) call "positive dissociative symptoms", and which take the form of intrusions and flashbacks, etc.

[6]Levine believes that it is the coupling of intense emotions such as fear with tonic immobility which renders the response traumatic. This coupling prevents its natural discharge from the body

suggesting that for humans it is this cognitive appraisal, more than the emotional response of fear, which plays a central role in trauma. It is easy enough to imagine the helplessness that a fear for one's life could invoke. It is also quite plausible that a 'fear for life' could also mean not knowing whether one can survive certain circumstances, which is particularly true for children who are abused and neglected by a care giver.

## Discussion

In the literature, tonic immobility is very often referred to as passive avoidance or resistance. The two preceding responses to tonic immobility are flight and fight, which are active responses. It does not follow however that tonic immobility is passive in comparison, despite appearances. I believe that labelling tonic immobility as "passive" is derogatory and superficial and could in fact give impetus to negative appraisals such as "I was asking for it" and "I should have put up a fight". It also illustrates a fundamental misunderstanding of the survival function of innate responses such as tonic immobility. Immobility is not used to passively avoid or resist rape or any other threat, it is *involuntarily* employed to avoid further injury resulting in death. That purpose is best accomplished by remaining as still and as quiet as possible, 'playing dead' in other words. Externally this might appear passive, but inside the organism a lot is happening. I believe therefore that peritraumatic responses such as tonic immobility, are ingenious dissociative mechanisms which temporarily protect against overwhelming experiences, and without which physical and psychological disintegration could occur. What is needed therefore, is a deeper understanding and knowledge of these survival behaviours, so that detrimental appraisals such as those mentioned above and intense emotions such as shame and self blame can be avoided because of their propensity to induce trauma.

The lack of importance and understanding given to the body and its innate survival behaviours, has a detrimental impact on the theory and, consequently, the treatment of trauma. This crude separation of mind and body is outdated, as the more successful approaches to trauma treatment which incorporate the body illustrate, see for example (Levine, 2010; Ogden, Pain, & Fisher, 2006). Yet, paradoxically, despite the minimisation of the role that the body plays in trauma within mainstream psychiatry, only threats to physical integrity (i.e., the body) are mentioned in criterion A1, whereas explicit references to emotional abuse and neglect are absent from this

criterion. It is clearly essential that the psychological integrity of a person be threatened for trauma to occur, and this threat may or may not include danger or harm to the body. This is why I believe that there is no such thing as an objective stressor. Subjective experience is the most definitive proof of being traumatised. Consequently, even if an A1 event is not nominated, trauma should still be assessed for if there are signs of traumatic response.

For all of the reasons argued herein, I believe that trauma, and consequently dissociation, are a lot more prevalent than currently asserted. The definition of a traumatic stressor in the DSM is inherently one of extraordinary events, not experiences. Many PTSD instruments—designed according to the DSM's PTSD criteria—measure events which are 'extraordinarily stressful', 'extremely stressful' or 'life threatening'. Yet an event, even an A1 event, can only ever be life threatening if experienced as so. In reality, having to nominate A1 events excludes many people who have been traumatised by so-called ordinary events that were experienced as life threatening and extremely stressful. The DSM states that criterion A2—the traumatic response—was deleted because it had no utility in predicting the onset of PTSD. Yet criteria B to E are the direct result of a traumatic response, not an A1 event. It becomes crucial therefore to determine what constitutes a threat, I am saying that it is not the event but the experience of the event that needs to assessed for threat, so an accurate diagnosis can be made. Responses—emotions, appraisals, dissociative experiences—need to be included in any comprehensive model of trauma, because a threat cannot be internalised without them (again see my proposed model in Figure 1).

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